

# APPENDIX A Roadway Landscape Plan

#### APPENDIX A

## ROADWAY LANDSCAPE PLAN

The roadways proposed through public land administered by the Bureau of Land Management (BLM; public land) would be landscaped as described in this appendix. The landscaping would be designed to minimize wildfire danger through a Firewise landscape program while providing an aesthetic traveling experience. Firewise landscaping has been studied in detail by numerous groups and several publications and resources are available on this subject. The publications and resources used to create the following guidelines and plant lists include: 1) *Firewise Landscaping with Vines and Ground Covers by BLM*, 2010<sup>1</sup>;2) *Landscaping with Native Plants in the Intermountain Region*<sup>2</sup>, by the Idaho Native Plant Society; and 3) the BLM and the Idaho Firewise<sup>3</sup> organization. Fire safety requirements and landscaping can work very well together through the careful selection and placement of plant materials that have proven to be effective in reducing the risk of fire. Final species selections and design will be approved by the BLM and are subject to availability.

**Design Concept:** The landscape concept for the proposed access ROW through public lands would utilize a specific zoned planting program and would include various fire control techniques. These techniques would include: 1) landscape spacing criteria that minimize the potential spread of wildfire and allow firefighters and firefighting equipment such as engines, trucks, and bulldozers, to maneuver easily between planting areas; 2) the selection of fire resistant plants that do not readily ignite from a flame or other ignition sources; and 3) use of inert materials on the ground plane. Fire resistant plants can be damaged or even killed by fire, but their foliage and stems do not significantly contribute to the fuel and, therefore, the fire's intensity. A list of such plants that are acclimated to the region's climate and recommended by the aforementioned publications and organizations is provided below. Plants from this list would be selected for use in the landscaping, as approved by the BLM. The planted street edges would be drip irrigated and targeted to specific plants in order to encourage xeric plant materials. Landscape areas would be maintained to a specification consistent with typical community roadways. This means landscaping would be kept free of noxious weeds, debris, and dead plant material that could contribute to fire. Further, nonnative annual plants, such as cheatgrass (*Bromus tectorum*), would be regularly controlled to reduce the risk of and spread of wildfire. If native shrubs become naturally established within the roadway landscape zone, plants would be removed or trimmed, as appropriate, to maintain spacing to minimize the spread of wildfire.

<sup>&</sup>lt;sup>1</sup> BLM 2010. Firewise Landscaping with Vines and Ground Covers.

<sup>&</sup>lt;sup>2</sup> Landscaping with Native Plants in the Intermountain Region, United States Department of Interior Bureau of Land Management, 2003.

<sup>&</sup>lt;sup>3</sup> http://www.idahofirewise.org

Roadway Landscape Zone: This area represents the road median and the first 14 to 38 feet from back of curb extending outward on both outside edges of the road (Figures 1 and 2). The width of the roadway landscape treatment would vary and integrate into the topography to minimize contrast between this zone and the Native Revegetation Zone. The roadway landscape treatment would complement the existing native surroundings. This treatment would serve to minimize the spread of fire above that of the paved road by utilizing proper plant selection and spacing. Regular maintenance and the combination of irrigated plant groupings and use of a rock/inert material would reduce the possibility of a wildfire igniting from the roadway. This landscape area would also employ a deer retardant plant palette, to reduce the attractiveness of the irrigated area to deer. The landscape treatment for this zone would consist of the following:

- 1. A variety of shrubs and ground covers as well as appropriate specimen trees.
- 2. Planting occurring in clusters and groupings.
- 3. Irrigated and maintained native grasses.
- 4. Cobble overlaying a weed barrier designed into low topographic and drainage areas.
- 5. Granite/rock material mulch (less than 3 inches) overlaying a weed barrier throughout.
- 6. Landscape spacing to minimize fire spread.
  - a. Trees or tree clusters would be located a distance of approximately two times their maximum height from other trees or tree clusters.
  - b. Shrubs or shrub clusters would be located a distance of approximately three times their maximum height from other shrubs or shrub clusters.
  - c. Tall shrubs (greater than 3 feet) would not be located under or adjacent to trees.

# Roadway Landscape Plant List (plant palette)

#### Trees

Celtis reticulata – Netleaf Hackberry Sorbus scopulina – Rocky Mountain Ash Populus deltoids – Eastern Cottonwood

#### Shrubs

Amelanchier alnifolia – Serviceberry
Arctostaphylos uva-ursi – Kinnikinnick
Atriplex canescens – 4-Wing Saltbrush
Cercocarpus ledifolius – Curl-leaf Mountain Mahogany
Chamaebatiaria millefolium – Fern Bush
Chrysothamnus viscidiflorus – Green Rabbitbrush

Crataegus douglasii – Douglas Hawthorn

Holodiscus dumosus – Rockspirea

Philadelphus lewisii – Syringa

*Prunus virginiana* – Chokecherry

*Purshia tridentata* – Bitterbrush

Rhus trilobata - Oakleaf Sumac

Ribes aureum - Golden Currant

Yucca glauca - Narrowleaf Yucca

## Grasses

Poa secunda – Sandberg Bluegrass

Pseudoroegnaria spicata – Bluebunch Wheatgrass

Elymus elymoides – Squirreltail

Achnathereum hymenoides – Indian Ricegrass

## Accents/Groundcovers

Antennaria microphylla – Littleleaf Pussytoes

Carex geyeri– Geyer's Sedge

Cerastium tomentosum – Snow in Summer

Delphinium andersonii– Anderson's Larkspur

Gaillardia aristata– Blanket flower

Hemerocallis fulva – Daylily

Linum lewisii – Lewis' Flax

Lupinus argenteus – Silver Lupine

Penstemon deustus– Hot Rock Penstemon

Penstemon eatonii – Firecracker Pensetmon

Phlox subulata – Creeping Phlox

Thymus praecox – Creeping Thyme

Accent Landscape Zone: This area would be very similar in character and plant selection as the Roadway Landscape Zone, but the plant density may be greater (Figure 2). The varying height and width of each plant species would be taken into account during final design and placement. All plants on the roadway landscape plant list would be permissible in the Accent Landscape Zone. This area is seen as a special location due to its proximity to proposed trail overpass and underpass structures and their architectural opportunities. Accent Landscape Zones would be limited to 200 feet in front of and 200 feet behind any trail overpass or underpass. Accent Landscaping Zones would be regularly maintained and irrigated using a combination of drip and spray irrigation.

**Native Revegetation Zone:** This area would generally encompass the balance of the disturbed area beyond the Roadway Landscape Zone (Figures 1 and 2). This area would be temporarily irrigated and regularly maintained to establish native plants consistent with the

native plant palette listed below. Plants from the Roadway Landscape Zone would not be used in the Native Revegetation Zone unless specifically listed below. The planting concept would be based on natural form landscape with plantings in smaller clusters and lower densities than the Roadway Landscape Zone allowing for easy and manageable access through and around this transition area. The Native Revegetation Zone would also include the use of a BLM approved weed-free hydroseed mix that would establish ground cover and minimize erosion. The landscape treatment for this zone would consist of the following:

- 1. Groundcover and low shrubs
- 2. Cobble/granite rock material mulch (less than 3 inches) overlaying a weed barrier throughout will be designed into the surface area.
- 3. Native material such as Sandberg bluegrass, squirreltail, and native forbs integrated into the landscape palette.

# Plant palette

Poa secunda – Sandberg bluegrass
Pseudoroegnaria spicata – Bluebunch wheatgrass
Elymus elymoides – Squirreltail
Achnathereum hymenoides – Indian ricegrass
Balsamorhiza sagittata – Arrowleaf Balsamroot
Eriogonum umbellatum. – Sulfur Buckwheat
Linum lewisii – Lewis' Flax
Achillea millefolium – Western yarrow
Phlox aculeata – Sagebrush Phlox
Phlox hoodii – Spiny Phlox
Machaeranthera canescens – Hoary Tansyaster
Erigeron pumilus – Shaggy Fleabane
Astragalus purshii – Wollypod Milkvetch

**Soft Trail:** A detached, multi-use trail running along one side of the proposed roadways would be made of stabilized, decomposed granite composition (Figures 1 and 2). The trail would be free of vegetation and sized at 10 feet wide so an equestrian user and pedestrian can pass each other safely. The trail would connect the M3 Eagle planned community to existing neighborhoods in the North Eagle area.



# Appendix A, Figure 2

